

642 - 562

Ree L# 94

Approximation Method for the Calculation of Optical
Anisotropies of Macromolecules, by T. M. Birshteyn,
M. V. Vol'kenshteyn, et al, 12 pp.
RUSSIAN, per, Vysokomolekulyarnye Soedineniya,
Vol IV, No 5, 1962, pp 670-677. 9224831
AEC-ANL-Tr-58

Sci-Phys
Oct 64

267,845

Synthesis of Polyferroorganosiloxanes and
Polyferroaluminosiloxanes, by K. A. Andrianov
T. H. Ganina, 9 pp.

RUSSIAN, per, Vysokomolekulyarnye Soedineniya,
Vol IV, No 5, 1962, pp 678-682.

Navy Tr 3290/NHL 920

Sci - Chem
Jan 63

219,887

Chromatographic Method of Fractionation.

1. Modified Column for the Fractionation
of Polymers, by O. G. Tarakanova, E. S. Chumnev/

RUSSIAN, per, Vysokomolekulyarnye Soedineniya,
Vol IV, 1962, pp 683-689.

NEL M Gpho

ATS RJ-3829

229,342

Sci - Chem
May 63

Kargin, V. A., Sogolova, T. I., and Pavlichenko, N. P.
RELAXATION EFFECTS IN CRYSTALLINE POL-
YOLEFINS. [1963] 5p. 8 refs.
Order from OTS or SLA \$1.10

63-14311

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1962, v. 4 [no. 5] p. 738-742.

DESCRIPTORS: *Polymers, *Ethylenes, *Propenes,
*Relaxation time, Crystallization, Transition tem-
perature, *Phase studies, Polyethylene plastics.

The relaxation properties of crystalline polyolefins
were investigated over a wide range of temperatures
under conditions of sinusoidal force action of constant
amplitude. Under such conditions the crystalline
polymers were found to possess a broad relaxation
spectrum over the entire interval from T_g to T_f . The
importance of determining the character of the
(Chemistry--Organic, TT, v. 10, no. 3)

(over)

63-14311

I. Kargin, V. A.
II. Sogolova, T. I.
III. Pavlichenko, N. P.

Office of Technical Services

A New Method for the Preparation of Block
Copolymers, by Yu. G. Kryazhev, Z. A. R
Rogovin.

RUSSIAN, par, Vysok Soedin, Vol LX IV, No
5, 1962, pp 783-784.

ATS RJ-3831

Sci-Chem
Dec 63

244,876

Tager, A. A., Suvorova, A. I. and others.
PLASTICIZATION OF POLY (METHYL METHACRY-
LATE) WITH ESTERS OF DIPHENIC AND NAPHTHA-
LIC ACIDS. Pt. 2 of Effect of the Chemical Structure
and Size of Plasticizer Molecules on the Glass Tem-
perature of Polymers. [1962] 7p.
Order from ATS \$9.00

ATS-38P64R

Trans. of Vysokomolekul[yarnye] Soedin[eniya] (USSR)
1962, v. 4, no. 6, p. 809-814.

DESCRIPTORS: *Plasticizers, Molecular structure,
Phenyl radicals, Naphthyl radicals, Acids, Esters,
*Acrylic resins, Hardening, Temperature.

(Materials--Plastics, TT, v. 9, no. 2)

63-12030

- I. Tager, A. A.
- II. Suvorova, A. I.
- III. Title: Effect . . .
- IV. ATS-38P64R
- V. Associated Technical
Services, Inc., East
Orange, N. J.

Office of Technical Services

Studies of Chelate Polymers, Vol 5, Chelate
Polymers of Bis-dithiocarbamic Acids and
Metals, by A. P. Terent'ev, et al.
RUSSIAN, per, Vysokomol. Soed., 1962,
Vol 4, No 6, pp 821-827.
NLL 7773.75 1964 (T-R-432) (On Loan)

Aug 65

287,145

CFST1 TT-44-11830

Nitrogen-containing Polymers with ~~High~~ Para-
magnetic Properties, by V. I. Mal'tsev.

RUSSIAN, per, Vysok Seodin, Vol I IV, No 6,
1962, pp 848-850.

ATS RJ-3842

Sol-chem
Dec 63

244.915

Dudina, L. A. and Enkolopyan, N. S.
INITIATION MECHANISM IN THE THERMAL DEGRADATION OF POLYMERS. [1962] 8p.
Order from ATS \$9.65

ATS-39P64R

Trans. of Vysokomolekul [yzrnye] Soedin[eniya] (USSR)
1962, v. 4, no. 6, p. 869-875.

DESCRIPTORS: *Polymers, Pyrolysis, Chemical reactions.

(Chemistry--Physical, TT, v. 9, no. 2)

63-12029

I. Dudina, L. A.
II. Enkolopyan, N. S.
III. ATS-39P64R
IV. Associated Technical
Services, Inc.,
East Orange, N. J.

Office of Technical Services

Korshak, V. V. and Smirnov, R. N.
CHANGE IN THE AGGREGATE STATE OF POLYMERS
ON MERCURATION. [1962] 5p.
Order from ATS \$8. 25

ATS-40P64R

Trans. of Vysokomolekul[yarnye] Soedin[eniya] (USSR)
1962, v. 4, no. 6, p. 889-893.

DESCRIPTORS: *Polymers, Physical properties,
*Mercury.

(Chemistry--Physical, TT, v. 9, no. 2)

63-12031

I. Korshak, V. V.
II. Smirnov, R. N.
III. ATS-40P64R
IV. Associated Technical
Services, Inc., East
Orange, N. J.

Office of Technical Services

Tsvetkov, V. N.
SHAPE ASYMMETRY AND OPTICAL ANISOTROPY OF
SHORT MOLECULAR CHAINS. [1962] 8p.
Order from ATS \$12.00

ATS-41P64R

Trans. of Vysokomolekul[yarnye] Soedin[eniya]
(USSR) 1962, v. 4, no. 6, p. 894-900.

DESCRIPTORS: *Stereochemistry, Molecular structure,
Optics.

(Chemistry--Organic, TT, v. 9, no. 2)

63-12001

I. Tsvetkov, V. N.
II. ATS-41P64R
III. Associated Technical
Services, Inc., East
Orange, N. J.

ATS-RJ-3588

Office of Technical Services

Cooperative Phenomena in the Annealing and
Softening of PVA, by Yu. Sharonov, M.
Vol'kenshtein.

RUSSIAN, per, Vysokomolekulyarnye Soedineniya,
Vol. 4, No. 6, 1962, pp 917-921.
CSIRO/No.7648

Sci -
Aug 67

335-581

Molecular Ordering in Polymers, by D. N. Bort,
Yu. V. Ovchinnikov, et al, 8 pp.
RUSSIAN, per, Vysokomolekulyarnye Soedineniya,
Vol IV, 19262, pp 935-939. 9225420
AEC-SC-T-64-1622

Sci-Phys
Dec 64

269,419

Korshak, V. V., Vinogradova, S. V., and
Valetskii, P. M.
MIXED POLYARYLATES FROM TEREPHTHALIC
ACID, DIHYDROXYDIPHENYL PROPANE, AND ALI-
PHATIC POLYHYDRIC ALCOHOLS. Pt. 37 of Hetero-
chain Polyesters. [1963] 8p.
Order from ATS \$10.50 ATS-50Q67R

Trans. of Vysokomolekul[yarnye] Soedin[eniya] (USSR)
1962, v. 4, no. 7, p. 987-994.

DESCRIPTORS: *Esters, *Polymers, Synthesis,
Terephthalic acid, Hydroxides, Phenols, Phenyl
radicals, Propanes, Alcohols.

(Chemistry--Organic, TT, v. 9, no. 9)

63-12822

- I. Title: Heterochain
polymers
2. Title: Polyarylates
- I. Korshak, V. V.
- II. Vinogradova, S. V.
- III. Valetskii, P. M.
- IV. ATS-50Q67R
- V. Title: Heterochain...
- VI. Associated Technical
Services, Inc., East
Orange, N. J.

ATS 45-3804

Office of Technical Services

Entelis, S. G., Nesterov, O. V., and Bondareva, G. G.
INTERFACIAL POLYCONDENSATION OF PHTHALOYL
CHLORIDE WITH PIPERAZINE. [1962] 6p.
Order from ATS \$10.00 ATS-32P66R

Trans. of Vysokomolekul[yarnye] Soedin[eniya] (USSR)
1962, v. 4, no. 7, p. 995-999.

DESCRIPTORS: Pyrazines, *Chlorides, Condensation
reactions, Surfaces.

(Chemistry--Organic, TT, v. 10, no. 2)

63-12607

I. Entelis, S. G.
II. Nesterov, O. V.
III. Bondareva, G. G.
IV. ATS-32P66R
V. Associated Technical
Services, Inc.,
East Orange, N. J.

A75 AT-3855

Office of Technical Services

Milovskaya, E. B. and Dogopol'skaya, P. I.
THE ROLE OF AMINES IN POLYMERIZATION USING
ZIEGLER CATALYSTS. [1963] 6p.
Order from ATS \$8.00 ATS-58Q70R

Trans. of Vysokomolekul'yarnye Soedin[eniya] (USSR)
1962, v. 4, no. 7, p. 1049-1052.

DESCRIPTORS: *Amines, *Polymerization, Catalysts,
Ziegler catalysts.

(Chemistry--Organic, TT, v. 10, no. 6)

63-17779

I. Milovskaya, E. B.
II. Dogopol'skaya, P. I.
III. ATS-58Q70R
IV. Associated Technical
Services, Inc.,
East Orange, N. J.

ATS RJ-3825

Office of Technical Services

Andrianov, K. A. and Rumba, G. Ya.
THE CATALYTIC POLYMERIZATION OF HEXA-
METHYLCYCLOTRISILAZANE AND OCTAMETHYL-
CYCLOTETRASILAZANE. 28 Sep 62, 7p. 5 refs.
Order from OTS or SLA \$1.10 63-10082

Trans. of Vysokomolekul[yarnye] Soedin[eniya] (USSR)
1962, v. 4, p. 1060-1063.

DESCRIPTORS: *Polymerization, *Methyl radicals,
*Silicon compounds, *Nitrogen compounds, Polymers,
Methanes, Catalysis, Synthesis.

The reactions of hexamethylcyclotrisilazane and
octamethylcyclotetrasilazane in the presence of alkali
were studied, and it was shown that the reaction is
accompanied by the evolution of methane and formation
of "cycloliner" polymers. Polymers with molecular
chains containing the Si-N-Si bond, with m.p. up to
500°, and good solubility in benzene were synthesized.
(Author)

63-10082

I. Andrianov, K. A.
II. Rumba, G. Ya.

(Chemistry--Organic,
TT, v. 9, no. 12)
Office of Technical Services

Techniques of Obtaining and Evaluating the IR-
Spectra of Fibres in Polarised Light, by N. V.
Mikhailov, M. V. Shablygin,

RUSSIAN, par, Vysshemolekulyarnye Soedineniya,
Vol IV, No 8, pp 1157-1162.

N ALZ N 10014

Sci - Phys
May 63

229,345

Preparation and Properties of Polyphenylene
Methyl Polymers. I. Synthesis of Polyarylene-
Methyl Polymers by Polycondensation of
Aromatic Hydrocarbons With Formaldehyde, by
A. A. Vansheidt. 8 pp.

RUSSIAN, per, Vysokomolekulyarnyye
Soedineniya, Vol. IX, No 8, 1962, pp 1176-1185.

MLL Ref: 5828.4 1963 (10105)
(Loan)

Sci -
Jul 63

ATS RJ-3854
also 61865R

238,382

Mikhailov, N. V., Tokareva, L. G. and others.
THE PROBLEM OF STABILIZING POLY(ETHYLENE
TEREPHTHALATE) MELTS. [1963] 9p.
Order from ATS \$13.25

ATS-84Q68R

Trans. of Vysokomolekul'yarnye Soedin[eniya] (USSR)
1962, v. 4, no. 8, p. 1186-1192.

DESCRIPTORS: *Polyethylene plastics, Stability,
Phthalates.

CTS TT-63-20478(12pp)

TT-63-18292(21pp)(24pp)

(Materials--Plastics, TT, v. 10, no. 6)

63-17461

63-18292

1. Title: Polyethylene
terephthalate
- I. Mikhailov, N. V.
- II. Tokareva, L. G.
- III. ATS-84Q68R
- IV. Associated Technical
Services, Inc.,
East Orange, N. J.

ATS RJ-3845

Office of Technical Services

E.P.R. Study of the Radiation Vulcanization
of Rubber in the Presence of Sulfur and
Hexachloroethane, by Z. N. Tarasova.
RUSSIAN, per, Vysokomol Soedin, Vol 4, No 8,
1962, pp 1204-1208.
Chem Trans Sv 2814

326,335

Sci - Materials
May 67

Petrov, K. A., Nifant'ev, E. E., and
Novoselov, N. N.
SYNTHESIS OF POLYPHOSPHONATES BY
TRANSESTERIFICATION OF ARYL PHOSPHONATES
WITH GLYCOLS. Pt. 4 [of] Phosphorus-Containing
Polymers. [1963] 6p.
Order from ATTS \$8.20 ATS-85Q68R

Trans. c' Vysokomplekulyarnye Soedineniya (USSR)
1962, v. 4, no. 8, p. 1214-1218.

DESCRIPTORS: Esterification, Synthesis (Chem-
istry), *Phosphorus, *Polymers.

(Chemistry--Organic, TT, v. 10, no. 6)

63-17465

- I. Title: Polyphosphonates
2. Title: Aryl phosphonates
- I. Petrov, K. A.
- II. Nifant'ev, E. E.
- III. Novoselov, N. N.
- IV. ATS-85Q68R
- V. Title: Phosphorus...
- VI. Associated Technical
Services, Inc.,
East Orange, N.J.

ATJ RJ-3843

Office of Technical Services

Petrov, K. A., Nifant'ev, E. E. and others.
SYNTHESIS OF POLYPHOSPHITES AND
POLYPHOSPHONITES FROM GLYCERAL AND
PENTABERYTHRITOL. PT. 5 [of] Phosphorus-
Containing Polymers. [1963] 5p.
Order from ATS \$7.50 ATS-86Q68R

Trans. of Vysokomolekul [yarnye] Soedin[eniya]
(USSR) 1962, v. 4, no. 8, p. 1219-1222.

DESCRIPTORS: PETN, Phosphites, Synthesis
(Chemistry), *Phosphorus, *Polymers.

(Chemistry--Organic, TT, v. 10, no. 6)

63-17464

63-16281

1. Title: Polyphosphonites
2. Title: Glyceral
3. Title: Polyphosphites
- I. Petrov, K. A.
- II. Nifant'ev, E. E.
- III. Title: Phosphorus...
- IV. ATS-86Q68R
- V. Associated Technical
Services, Inc.,
East Orange, N. J.

ATS RJ-3844
OTS 63-16281

Office of Technical Services

Synthesis of Graft Copolymers, by
V. V. Korshak.
RUSSIAN, per, Vysokomolekulyarnye
Soedineniya, Vol 4, No 10, 1962,
pp 1469-1473
NTC 72-12393-11I

July 72

Kinetics of Reactions of Saturated
Hydrocarbon Polymers Initiated by
Peroxides, by R. Rado.

RUSSIAN, per, Vysokomolekulyarnye
Soedineniya, Vol 4, No 11, 1962,
pp 1746-1751.

NTC 72-11263-07C

May 72

POLYMER SCIENCE USSR, 1963, VOL. 4, NO. 3,
P. 397-600. Sep 63, 1v.
Order from PP \$140.00/year (single articles available)

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1962, v. 4, no. 9, p. 1303-1309, 1324-1332, 1338-1344,
1354-1374, 1380-1384, 1390-1393; no. 10, p. 1486-
1502, 1515-1527, #1528-1536; no. 11, p. 1654-1671,
#1682-1695, 1739-1745; no. 12, p. 1770-1783,
1796-1798, 1806-1811, #1822-1828. Abstracts are
included of selected articles from v. 4, no. 11-v. 5,
no. 2.

#*Other translations are available elsewhere.

Separate entries have been prepared for the individual
articles included in this issue.

DESCRIPTORS: *Polymers, Chemistry.

(Chemistry--Organic, TT, v. 11, no. 1)

TT-63-22211-3

I. Pergamon Press, Inc.,
New York

Office of Technical Services

Vansheidt, A. A., Mel'nikova, E. P., and Gladkovskii, G. A.

THE PREPARATION AND PROPERTIES OF POLYMERS OF THE TYPE OF POLYPHENYLENEMETHYL. II. THE PREPARATION OF POLYARYLENEMETHYLS BY POLYCONDENSATION OF AROMATIC HYDROCARBONS WITH THEIR bis-ACETOXY AND bis-CHLOROMETHYL DERIVATIVES. Sep 63, 8p 4refs
Order from PP \$140.00/year in Polymer Science USSR, v. 4, no. 3, p. 397-404

Trans. of Vysokomolekulyarnye Soedineniya (USSR) 1962, v. 4, no. 9, p. 1303-1309. (Abstract available)

DESCRIPTORS: *Phenolic plastics, Preparation, *Benzene derivatives, Toly radicals, Methyl radicals, *Toluenes, Alkoxy radicals, Chlorides, Polymerization, Condensation reactions, Physical properties.

(Materials--Plastics, TT, v. 11, no. 1)

(over)

TT-63-22211-3 (p. 397-404)

1. Title: Durene
2. Title: Polyarylene-methyls
- I. Vansheidt, A. A.
- II. Mel'nikova, E. P.
- III. Gladkovskii, G. A.
- IV. Title: Preparation...

Office of Technical Services

Bartenev, G. M. and Vishnitskaya, L. A.
COMPARISON OF VARIOUS EQUATIONS FOR THE
DEFORMATION OF NETWORK POLYMERS WITH
EXPERIMENT. Sep 63, 11p 30refs
Order from PP \$140.00/year in Polymer Science USSR,
v. 4, no. 3, p. 404-414

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1962, v. 4, no. 9, p. 1324-1332.

DESCRIPTORS: *Polymers, *Vulcanizates, *Rubber,
*Synthetic rubber, Deformation, Elasticity, Rupture,
Equations.

(Materials--Rubber, TT, v. 11, no. 1)

TT-63-22211-3 (p. 404-414)

I. Bartenev, G. M.
II. Vishnitskaya, L. A.

Office of Technical Services

Kovalevskaya, R. N., Tinyakova, E. I., and
Dolgoplosk, B. A.

A STUDY OF HETEROGENEOUS CATALYST SYSTEMS BASED ON COBALT OXIDES AND SALTS AND ORGANO-ALUMINUM COMPOUNDS. Sep 63, 8p 15refs

Order from PP \$140.00/year in Polymer Science USSR, v. 4, no. 3, p. 414-421

Trans. of Vysokomolekulyarnye Soedineniya (USSR) 1962, v. 4, no. 9, p. 1338-1344. (Abstract available)

DESCRIPTORS: *Ziegler catalysts, *Cobalt catalysts, Oxides, Salts, *Aluminum compounds, Alkyl radicals, Ethyl radicals, Halides, Dienes, *Butadienes, Polymerization, *Ethanes, *Ethylenes, Complex compounds.

(Chemistry--Organic, TT, v. 11, no. 1)

(over)

TT-63-22211-3 (p. 414-421)

I. Kovalevskaya, R. N.
II. Tinyakova, E. I.
III. Dolgoplosk, B. A.

Office of Technical Services

Studies In Polymer Synthesis. Part 7.
Photooxidative Activation of a Polyester-
Acrylate Oligomer by the Visible Region of
the Spectrum, by G. P. Gladyshev, S. R.
Refikov.

RUSSIAN, per, Vysok Seodin, Vol IV, NO 9,
1962, pp 1351-1353.

ATS RJ-3833

Sci-Chem
Dec 63

244.877

Golubenkova, L. I., Shabadash, A. N., Nikonova, S. N., and Akutin, M. S.
THE GRAFTING OF POLYMERS TO SOLID SURFACES. I. AN INFRARED STUDY OF THE INTERACTION OF ORGANOSILICON COMPOUNDS AND GLASS. Sep 63, 8p 16refs
Order from PP \$140.00/year in Polymer Science USSR, v. 4, no. 3, p. 422-429

Trans. of Vysokomolekulyarnye Soedineniya (USSR) 1962, v. 4, no. 9, p. 1354-1360. (Abstract available)

DESCRIPTORS: *Composite materials, *Glass textiles, *Binders, *Silanes, Methyl radicals, Chlorides, Plastics, Chemical bonds, Infrared spectroscopy.

When the microporous glass is treated with trimethylchlorosilane a stable chemical bond is formed that is (Materials--Adhesives, TT, v. 11, no. 1) (over)

TT-63-22211-3 (p. 422-429)

- I. Title: Trimethyl chlorosilane
- I. Golubenkova, L. I.
- II. Shabadash, A. N.
- III. Nikonova, S. N.
- IV. Akutin, M. S.
- V. Title: Infrared...

Office of Technical Services

Bakalo, L. A., Krentsel', B. A., and Topchlev, A. V.
POLYMERIZATION OF SOME ORGANIC OXIDES. I.
POLYMERIZATION OF EPICHLOROHYDRIN. Sep 63,
8p 11refs
Order from PP \$140.00/year in Polymer Science USSR,
v. 4, no. 3, p. 429-435

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1962, v. 4, no. 9, p. 1361-1365. (Abstract available)

DESCRIPTORS: *Epoxy plastics, *Halohydrins,
Polymerization, *Catalysts, *Iron catalysts, Chlorides,
Propenes, Oxides.

A study was made of the polymerization of epichloro-
hydrin by a number of ionic catalytic systems. It is
shown that the FeCl_3 -propylene oxide "complex"
catalyst can be used to produce polyepichlorohydrin
of regular structure in good yield. The principal
(Materials--Plastics, TT, v. 11, no. 1) (over;

TT-63-22211-3 (p. 429-435)

1. Title: Epichlorohydrin
2. Title: Polyepichlorohydrin
- I. Bakalo, L. A.
- II. Krentsel', B. A.
- III. Topchlev, A. V.
- IV. Title: Polymerization...

Office of Technical Services

Mitsengendler, S. P., Andreeva, G. A., Sokolova, K. L., and Korotkov, A. A.

THE SYNTHESIS OF GRAFT COPOLYMERS BY THE ACTION OF POLYMERIC ORGANOMETALLIC COMPOUNDS ON POLAR POLYMERS AND A STUDY OF THEIR PROPERTIES. I. STYRENE-METHYL METHACRYLATE GRAFT COPOLYMERS. Sep 63, 10p 6refs

Order from PP \$140.00/year in Polymer Science USSR, v. 4, no. 3, p. 436-445

Trans. of Vysokomolekulyarnye Soedineniya (USSR) 1962, v. 4, no. 9, p. 1366-1374. (Abstract available)

DESCRIPTORS: *Graft polymers, *Styrene plastics, *Acrylic resins, Copolymerization, Catalysts, *Metalorganic compounds, Styrenes, *Lithium compounds.

(Materials--Plastics, TT, v. 11, no. 1)

(over)

TT-63-22211-3 (p. 436-445)

I. Mitsengendler, S. P.

II. Andreeva, G. A.

III. Sokolova, K. L.

IV. Korotkov, A. A.

V. Title: Styrene-methyl...

Office of Technical Services

Ermolina, A. V., Igonin, L. A., and Kargin, V. A.
A STUDY OF THE RELATIONSHIP BETWEEN
PHYSICO-MECHANICAL PROPERTIES AND THE
NATURE OF THE SECONDARY STRUCTURES IN
CRYSTALLINE POLYMERS, II. A PHOTOMICRO-
GRAPHIC STUDY OF SPHERULITE STRUCTURES
IN POLYAMIDE 68 IN BULK. Sep 63, 7p 12reis
Order from PP \$140.00/year in Polymer Science USSR,
v. 4, no. 3, p. 446-452.

Trans. of Vysokomolekulyarnys Soedineniya (USSR)
1962, v. 4, no. 9, p. 1380-1384. (Abstract available)

DESCRIPTORS: *Polyamide plastics, Physical prop-
erties, Mechanical properties, Microstructure,
Stresses, Photomicrography.

By means of the etching method a study has been made
of the secondary structures of Polyamide 68 in relation
(Materials--Plastics, TT, v. 11, no. 1) (over)

TT-63-22211-3 (p. 446-452)

- I. Ermolina, A. V.
- II. Igonin, L. A.
- III. Kargin, V. A.
- IV. Title: Photomicrographic...

Office of Technical Services

Lipatova, T. E., Budnikova, V. A., and Lipatov, Yu. S.

THE INTERACTION OF POLYMERS WITH FILLERS.
PT. 5. EFFECT OF THE CONDITIONS OF POLYMER APPLICATION TO GLASS FIBERS AND OF THE TREATMENT OF GLASS FIBERS ON THE POLYMER PROPERTIES. [1963] 7p.

Order from ATS \$12.00

ATS-56P66R

Trans. of Vysokomolekul(yarnye) Soedin(eniya) (USSR)
1962, v. 4, no. 9, p. 1398-1403.

DESCRIPTORS: *Glass textiles, *Polymers, Additives.

(Materials--Textiles, TT, v. 9, no. 12)

63-12815

I. Lipatova, T. E.

II. Budnikova, V. A.

III. Lipatov, Yu. S.

IV. ATS-56P66R

V. Associated Technical Services, Inc.,

East Orange, N. J.

VI. Title: Glass...

ATS RJ-3885

Office of Technical Services

Korolev, A. Ya., Bek, V. L., and Grishin, N. A.
ADHESION OF POLYTETRAFLUOROETHYLENE TO
METALS. [1963] [12]p. 8 refs.
Order from OTS or SLA \$1.60

63-189Z

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1962, v. 4, no. 9, p. 1412-1418.

DESCRIPTORS: Adhesion, *Fluorides, *Ethylenes,
Polymers, Metals, *Adhesives, Joints, Steel, Stainless
steel, Mechanical properties.

It is shown that Ftoroplast-4, which has several
valuable physico-technical and chemical properties,
can be used as a glue for metals. Gluing is effected by
heating under pressure metal specimens with an inter-
layer of Ftoroplast to temperatures exceeding the
melting point of the crystallites in the polymer and
then cooling the specimens. It is shown that the peel
(Materials--Adhesives, TT, v. 10, no. 11) (over)

63-189Z

1. Title: Polytetrafluoro-
ethylene
2. Title: Ftoroplast-4
- I. Korolev, A. Ya.
- II. Bek, V. L.
- III. Grishin, N. A.

~~YUKA EIA~~
~~OPENHURST~~
~~FR 11 82~~

Office of Technical Services

Synthesis of Graft Copolymers, IX.,
by V. V. Korshak.
RUSSIAN, per, Vysokomolekul. Soedin, Vol 4,
No 10, 1962, pp 1469-1473.
Chem Trans Sv 3139

Sci - Chemistry
Apr 67

324,643

Zelenov, Yu. V.

THE RELATIONSHIP BETWEEN THE STRUCTURE
AND DYNAMIC PROPERTIES OF RUBBER-LIKE
NETWORK POLYMERS OVER A WIDE RANGE OF
TEMPERATURES. Sep 63, 10p 13refs
Order from PF \$140.00/year in Polymer Science USSR,
v. 4, no. 3, p. 457-466

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1962, v. 4, no. 10, p. 1486-1494.

DESCRIPTORS: Polymers, *Rubber, *Synthetic
rubber, Mechanical properties, Elasticity, Molecular
structure, Thermodynamics.

(Materials--Rubber, TT, v. 11, no. 1)

TT-63-22211-3 (p. 457-466)

I. Zelenov, Yu. V.

Office of Technical Services

Razuvaev, G. A., Minsker, K. S., and Fedoseeva, G. T.

THE HETEROGENEOUS CATALYTIC POLYMERIZATION OF ETHYLENE IN THE PRESENCE OF $\text{TiCl}_3 \cdot \text{Al} \cdot \text{AlCl}_3$ AND $\text{TiCl}_3(\text{Al} \cdot \text{HCl})$. Sep 63, 10p 13refs

Order from PP \$140.00/year in Polymer Science USSR, v. 4, no. 3, p. 467-476

Trans. of Vysokomolekulyarnye Soedineniya (USSR) 1962, v. 4, no. 10, p. 1495-1502. (Abstract available)

DESCRIPTORS: *Polyethylene plastics, *Ethylenes, Polymerization, *Catalysts, *Titanium compounds, *Aluminum compounds, Chlorides, Hydrochloric acid, Solvents.

A study was made of the polymerization of ethylene in the presence of the heterogeneous catalyst systems (Materials--Plastics, TT, v. 11, no. 1) (over)

TT-63-22211-3 (p. 467-476)

I. Razuvaev, G. A.
II. Minsker, K. S.
III. Fedoseeva, G. T.

Office of Technical Services

Matsoyan, S. G., Elyazyan, M. A., and
Gevorkyan, E. Ts.

STUDIES IN CYCLIC POLYMERIZATION AND
COPOLYMERIZATION. X. A STUDY OF THE
ABILITY OF SOME ALIPHATIC DIVINYLAETALS
TO UNDERGO CYCLIC POLYMERIZATION. Sep 63,
6p 7 refs

Order from PP \$-40.00/year in Polymer Science USSR,
v. 4, no. 3, p. 476-481

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1962, v. 4, no. 10, p. 1515-1519. (Abstract available)

DESCRIPTORS: *Acetal plastics, Aliphatic compounds,
*Vinyl radicals, Aldehydes, Acetals, Polymerization.

Divinylcapronal, divinylbenzanthal, divinyl-3-methoxy-
propanal, divinyl-3-ethoxypropanal, divinyl-3-n-
propoxypropanal, divinyl-3-(1-chloro-ethyl)propanal
(Materials--Plastics, TT, v. 11, no. 1) (over)

TT-63-22211-3 (p. 476-481)

I. Matsoyan, S. G.
II. Elyazyan, M. A.
III. Gevorkyan, E. Ts.
IV. Title: Study...

Office of Technical Services

Korolev, G. V., Berlin, A. A., and Kefell, T. Ya.
POLYMERIZATION IN HIGHLY VISCOUS MEDIA
AND THREE-DIMENSIONAL POLYMERIZATION. II.
THE INITIAL STAGE OF POLYMERIZATION OF
POLYESTER-ACRYLATES. Sep 63, 9p 11refs
Order from PP \$140.00/year in Polymer Science USSR,
v. 4, no. 3, p. 482-490

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1962, v. 4, no. 10, p. 1520-1527. (Abstract available)

DESCRIPTORS: *Acrylic resins, Acrylic acid esters,
*Polymerization, Reaction kinetics, *Catalysts,
Carbonates, Degradation.

The initial rate, w_0 of polymerization (initiated by
dicyclohexylperoxydicarbonate) of polyester-acrylate
oligomers was measured by the thermometric method
at 50°. The oligomers differed in the length and nature
(Chemistry--Physical, T1, v. 11, no. 1) (over)

TT-63-22211-3 (p. 482-490)

I. Korolev, G. V.
II. Berlin, A. A.
III. Kefell, T. Ya.
IV. Title: Initial...

Office of Tech. Serv.

Lipatov, Yu. S.

[THE INTERACTION OF POLYMERS WITH FILLERS]
VI. CERTAIN RHEOLOGICAL CHARACTERISTICS OF
POLYMER SOLUTIONS IN THE PRESENCE OF
FILLERS. [1963] [18]p. 11 refs.

Order from OTS or SLA \$1.60

63-16597

Trans. of *Vysokomolekulyarnye Soedineniya* (USSR)
1962, v. 4, no. 10, p. 1528-1536.

DESCRIPTORS: *Polyvinyl alcohol, *Styrene plastics,
*Polymers, *Fillers, Glass, Powders, Gelatins,
Viscosity.

The effect of additions of finely dispersed glass powder
on certain rheological characteristics was studied in
aqueous solutions of gelatin and polyvinyl alcohol and
for benzene solutions of polystyrene of relatively high
concentrations. It was found that the addition of the
(Materials--Plastics, TT, v. 10, no. 7) (over)

63-16597

I. Lipatov, Yu. S.
II. Title: Certain ...

Pergamon Press

Office of Technical Services

Synthesis of Graft Copolymers. 10. The Grafting
of Styrene onto Polyethyleneteraphthalate
(Lavsan). 11. The Grafting of Vinyl Monomers
onto Silk and Wool, by V. Korshak.
RUSSIAN, per, Vysokomolekulyarnya Soedineniya,
Vol. 4, No. 11, 1962, pp 1625-1638
CSIRO/No. 6907

Sci -
Aug 67

335
~~385~~-292

X Chemical Reactions of Polymers. VIII. Degradation
of Polyhexamethylene Adipamide at High Temperatures,
by S. R. Rafikov.

RUSSIAN, per, Vysokomol Soedin, Vol IV, No 11,
1962, pp 1639-1646.

NLL Ref: 5828.4 1963 (10 382)
(Loan)

Sci - M/M
Oct 63

Shilov, A. E., Shilova, A. K., and Bobkov, B. N.
REACTION OF α -OLEFINS WITH SOLUBLE COM-
PLEX CATALYSTS OF THE ZIEGLER TYPE AND
THE INITIATION MECHANISM OF ETHYLENE POLY-
MERIZATION. [1963] [19p] 11 refs
Order from OTS, SLA, or ETC \$1.60 TT-64-14361

Trans. of Vysokomol[ekulyarnye] Soed[ineniya] (USSR)
1962, v. 4 [no. 11] p. 1688-1695. (Abstract available)

Other translations are available from ATS \$12.75 as
ATS-65Q67R [1963] 9p and from PP \$140.00/year in
Polymer Science USSR, v. 4, no. 3, p. 526-535.

DESCRIPTORS: *Polyethylene plastics, Preparation,
Alkenes, *Ethylenes, Polymerization, *Metalorganic
compounds, *Ziegler catalysts, *Titanium compounds,
*Aluminum compounds, Chlorides.

OTS-TT-64-16973
(Chemistry--Organic, TT, v. 11, no. 11)

TT-64-14361

I. Shilov, A. E.
II. Shilova, A. K.
III. Bobkov, B. N.

Office of Technical Services

63-17468

Shilov, A. E., Shilova, A. K., and Bobkov, B. N.
REACTION OF α -OLEFINS WITH SOLUBLE
ZIEGLER-TYPE COMPLEX CATALYSTS AND
THE INITIATION MECHANISM OF ETHYLENE
POLYMERIZATION. [1963] 9p.
Order from ATS \$12.75 ATS-65Q67R

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1962, v. 4, no. 11, p. 1688-1695.

DESCRIPTORS: *Ethylenes, Polymerization,
*Catalysts, Solubility, Chemical reactions,
Ziegler catalysts.

(Chemistry--Organic, TT, v. 10, no. 6)

I. Shilov, A. E.
II. Shilova, A. K.
III. Bobkov, B. N.
IV. ATS-65Q67R
V. Associated Technical
Services, Inc.,
East Orange, N. J.

ATS RJ-3824
Pergamon Press

Office of Technical Services

Shreiner, S. A., Zubov, P. L., and Volkova, T. A.
INTERNAL STRESSES IN EPOXY RESIN FILMS.
[1963] [6p] 8refs
Order from OTS or SLA \$1.10 63-20272

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1962, v. 4 [no. 11] p. 1714-1717.

DESCRIPTORS: *Epoxy plastics, *Thermal stresses,
*Plastic films, Hardening.

The increase and relaxation of stresses in epoxy resin ED-5 films in relation to their hardening temperature was investigated by a visual optical method. Thermal stresses arise at elevated temperatures. The relaxation of these stresses proceeds according to Shvedov's equation. The relaxation periods depend upon the nature of the hardening agent. With films formed in the presence of polyethylenepolyamine, equal and non- (Materials--Plastics, TT, v. 10, no. 10) (over)

63-20272

I. Shreiner, S. A.
II. Zubov, P. L.
III. Volkova, T. A.

Office of Technical Services

Korshak, V. V., Frunze, T. M., and Krasnyanskaya, E. A.
HETEROCHAIN POLYAMIDES. XXXI. EFFECT OF THE CYCLIZING CAPACITY OF MONOMERS ON THE POLYMER CHAIN TERMINATION PROCESS. [1963] 10p (figs formulae omitted) 13refs
Order from OTS, SLA, or ETC \$1.10 TT-63-20847

Trans. of Vysokomolekulyarnye Soedineniya (USSR) 1962, v. 4, no. 12, p. 1761-1769.

DESCRIPTORS: *Amides, *Polymers, *Polyamide plastics, Carboxylic acids, Amines, *Adipic acid, Polymerization, *Ethylene amines, *Succinic acid.

(See also TT-60-22693)

(Chemistry--Organic, TT, v. 11, no. 10)

TT-63-20847

- I. Title: Hetero-chain polymers
- I. Korshak, V. V.
- II. Frunze, T. M.
- III. Krasnyanskaya, E. A.
- IV. Title: Effect...

Office of Technical Services

Skuratov, S. M., Enikolopyan, N. S., Bonetskaya, A. K., and Voevodskii, V. V.
THE MECHANISM OF POLYMERIZATION OF
LACTAMS. Sep 63, 13 refs
Order from PP \$140.00/year in Polymer Science USSR,
v. 4, no. 3, p. 543-552

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1962, v. 4, no. 12, p. 1770-1778. (Abstract available)

DESCRIPTORS: *Polyamide plastics, *Lactams,
*Polymerization, Reaction kinetics, Phosphoric acids,
Sodium compounds, Hydroxides.

Experimental results are given from a study of the
kinetics of polymerization of ϵ -caprolactam and
 γ -benzothiolactam at 231-5° in the presence of: (a)
water, (b) water and phosphoric acid, and (c) water and
NaOH. The basic kinetic scheme of the polymerization
(Chemistry--Physical, TT, v. 11, no. 1) (over)

TT-63-22211-3 (p. 543-552)

1. Title: ϵ -Caprolactam
2. Title: γ -Benzenethiolactam
- I. Skuratov, S. M.
- II. Enikolopyan, N. S.
- III. Bonetskaya, A. K.
- IV. Voevodskii, V. V.

Office of Technical Services

Erikolopyan, N. S., Bonetskaya, A. K., and
Skuratov, S. M.
THE INDUCTION PERIOD IN THE POLYMERIZATION
OF ϵ -CAPROLACTAM AND ϵ -OENANTHOLACTAM
UNDER VARIOUS CONDITIONS. Sep 63, 6p 3 refs
Order from PP \$140.00/year in Polymer Science USSR,
v. 4, no. 3, p. 553-558

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1962, v. 4, no. 12, p. 1779-1783. (Abstract available)

DESCRIPTORS: *Polyamide plastics, *Lactams,
Polymerization, Reaction kinetics.

The experimentally determined length of the induction
period in the polymerization of ϵ -caprolactam and
 ϵ -oentanholactam is explained in terms of the basic
kinetic scheme of the process proposed previously.

(Author)

(Chemistry--Physical, TT, v. 11, no. 1)

TT-63-22211-3 (p. 553-558)

1. Title: ϵ -Caprolactam
2. Title: ϵ -Oenanthalactam

- I. Erikolopyan, N. S.
- II. Bonetskaya, A. K.
- III. Skuratov, S. M.

Office of Technical Services

Studying Vulcanization of Fluoro-
Copolymers With Polyamines by Infrared
Spectroscopy Method, by A. S. Novikov,
F. A. Galil-Ogly, 11 pp.
RUSSIAN, per, Vysokmol Soyed, Vol IV,
No 12, 1962, pp 1799-1804. 9699626
FTD-TT-65-1371

Sci - Biol & Med Sci
Feb 66

296,351

Donrachev, G. A. and Razuvaev, G. A.
REACTION OF DIBENZENECHROMIUM (O) WITH
ACRYLONITRILE AND THE MECHANISM OF POLY-
MERIZATION OF THE LATTER. [1963] 8p.
Order from ATS \$12.50 ATS-89Q68R

Trans. of Vysokomolekul'yarnye Soedin[eniya] (USSR)
1962, v. 4, no. 12, p. 1822-1828.

DESCRIPTORS: *Benzenes, *Chromium, *Acrylonitriles
Chemical reactions, *Polymerization.

(Chemistry--Organic, TT, v. 10, no. 1)

63-17159

I. Donrachev, G. A.
II. Razuvaev, G. A.
III. ATS-89Q68R
IV. Associated Technical
Services, Inc.,
East Orange, N. J.

ATS RJ-3832

Pergamon Press

Office of Technical Services

TT-64-15283

Volokhina, A. V., Fabrichnyi, B. P., Shalavina, I. P.,
Gold'farb, Ya. L.
THE POLYMERISATION OF C-ETHYL AND
C-PROPYL SUBSTITUTED OENANTHOLACTAMS.
[1963] 5p 9:efs [BNSL] T.1529 [DSIR] NLL M.10487.
Order from OTS, SLA, or ETC \$1.10 TT-64-15283

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1962, v. 4, no. 12, p. 1829-1832.

I. Volokhina, A. V.
II. Fabrichnyi, B. P.
III. Shalavina, I. P.
IV. Gold'farb, Ya. L.
V. BNSL-T-1529

VI. DSIR: NLL: M.10487

VII. British Nylon Spinners Ltd.
London (England)

(Chemistry--Organic, v. 12, no. 2)

Office of Technical Services

Razuvaev, G. A., Minsker, K. S., and Shapiro, I. Z.
COPOLYMERIZATION OF STYRENE WITH PROPYLENE
IN THE PRESENCE OF A HETEROGENEOUS
ZIEGLER-NATTA CATALYTIC SYSTEM. [1963] 6p.
Order from ATS \$8.80 ATS-05Q69R

Trans. of Vysokomolekul'yarnye Soedin[eniya] (USSR)
1962, v. 4, no. 12, p. 1833-1838.

DESCRIPTORS: *Copolymerization, Styrenes,
*Propenes, Catalysis, Ziegler catalysts.

(Chemistry--Physical, TT, v. 10, no. 5)

63-17335

- I. Title: Natta catalysts
- I. Razuvaev, G. A.
- II. Minsker, K. S.
- III. Shapiro, I. Z.
- IV. ATS-05Q69R
- V. Associated Technical
Services, Inc.,
East Orange, N. J.

ATS RJ-3821

Office of Technical Services

Kuleznev, V. N. and Igosheva, K. M.
A STUDY OF THE DENSITIES OF POLYMER
MIXTURES. [1963] 5p.
Order from ATS \$8. 25

ATS-60Q70R

Trans. of Vysokomolekul[arnye] Soedin[eniya] (USSR)
1962, v. 4, no. 12, p. 1858-1862.

DESCRIPTORS: *Mixtures, *Polymers, *Density.

(Chemistry--Organic, TI, v. 10, no. 10)

63-22163

- I. Kuleznev, V. N.
- II. Igosheva, K. M.
- III. ATS-60Q70R
- IV. Associated Technical
Services, Inc.,
East Orange, N. J.

NTC 71-14 082-11 I

Office of Technical Services

Induced Electromotive Force and Electrical
Strength of Irradiated Polyvinyl Chloride,
by V. D. Kuchin, A. K. Shastova, 6 pp.

RUSSIAN, per, Vysokomol Soyedineniya, Vol IV,
No 12, 1962, pp 1863-1866.

CIA/FDD XX-1533
NO FOREIGN DISSEM

Sci - Elec
May 64
USIB Internal Use Only

Romanov, A. and Lazar, M.
PREPARATION AND IDENTIFICATION OF
"ATACTIC POLYPROPYLENE-POLYSTYRENE"
GRAFT COPOLYMER. [1963] 6p.
Order from ATS \$8.00 ATS-06Q69R

Trans. of Vysokomolekul'yarnye Soedin[eniya]
(USSR) 1962, v. 4, no. 12, p. 1867-1871.

DESCRIPTORS: Polymers, *Copolymerization,
*Styrene plastics, *Propenes, Graft polymers.

(Chemistry--Organic, TT, v. 10, no. 7)

63-17360

1. Title: Atactic polymers
2. Title: Polypropylenc-
polystyrene
- I. Romanov, A.
- II. Lazar, M.
- III. ATS-06Q69R
- IV. Associated Technical
Services, Inc.,
East Orange, N. J.

ATS RJ-3823

Office of Technical Services

Polymers Consisting of Aromatic Rings Conjugated
With Heteroatoms, by V. I. Nikitina, A.I. Maklakov.

9 p.

RUSSIAN, per, Vysokomolekulyarnyye Soyedineniya;

Geterotsepnyye Vysokomolekulyarnyye, 1963,

pp 87-90. 9700137

FTD-TT-65-1355

Sci/Chemistry

May 66

301,086

Synergism of Antioxidants. II. Basic Effects
of the Action of Antioxidant Mixtures,
by M. S. Khlopyankina, 7 pp.

RUSSIAN, per, Vysokomol Soedineniya, Vol V,
1963, pp 195-199.

NLL Ref: 5828.4 1963 (5397) (Loan)

OTS TT-63-20280

Sci - Chem

Feb 64

63-20060

Fedotova, O. Ya., Losev, I. P., and Skripchenko, N. I.
AN INVESTIGATION OF THE REACTION OF
AROMATIC DIAMINES WITH DIISOCYANATES.
I. INFLUENCE OF CERTAIN FACTORS. [1963]

10p 7refs

Order from OTS or SLA \$1.10

63-20060

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1963, v. 5, no. 2, no. 2, p. 222-226.

DESCRIPTORS: Isocyanate plastics, *Isocyanates,
Chemical reactions, Titration, Quantitative analysis.,
*Amines, Reaction kinetics, Benzene derivatives.

The results of the first stage of the study of the laws
governing the reaction of diamines with diisocyanates,
using the reaction of N,N'-diethyl-4,4'-diarino-
diphenylmethane with 1,6-hexamethylenediisocyanate as
an example are presented.
(Organic--Chemistry, TT, v. 10, no. 10)

I. Fedotova, O. Ya.
II. Losev, I. P.
III. Skripchenko, N. I.
IV. Title: Influence . . .

Office of Technical Services

Fedotova, O. Ya., Losev, I. P., and Skripchenko, N. I.
AN INVESTIGATION OF THE REACTION OF ARO-
MATIC DIAMINES WITH DIISOCYANATES. II.
REACTIVITY OF SOME AROMATIC DIAMINES.

[1963] 11p 8refs

Order from OTS or SLA \$1.60

63-20061

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1963, v. 5, no. 2, p. 227-232.

DESCRIPTORS: Benzene derivatives, *Amines,
*Isocyanates, *Reaction kinetics, Alkyl radicals,
Substitution reactions, Isocyanate plastics, Quantitative
analysis.

The results of the study of the relative reactivity of
4,4'-diaminodiphenylmethane, 4,4'-diamino-
3,3'-diethyldiphenylmethane, and their N-alkyl sub-
stitution products are presented. The reactivity of
(Chemistry--Organic, TT, v. 10, no. 9) (over)

63-20061

I. Fedotova, O. Ya.
II. Losev, I. P.
III. Skripchenko, N. I.
IV. Title: Reactivity . . .

Office of Technical Services

Maigel'dinov, I. A. and Tsyur, K. I.
THERMOMECHANICAL PROPERTIES OF CRYSTAL-
LINE POLYMERS. I. POLYPROPYLENE. [1964] [19p]
26refs

Order from OTS, SLA, or ETC \$1.60 TT-64-10867

Trans. of Vysokomol[ekulyarnye] Soed[ineniya] (USSR)
1963, v. 5, no. 2, p. 243-251.

Another trans. is available from PP \$14.00/year in
Polymer Science USSR, v. 4, no. 4.

(Physica--Solid State, TT, v. 11, no. 12)

TT-64-10867

I. Maigel'dinov, I. A.
II. Tsyur, K. I.
III. Title: Polypropylene

Office of Technical Services

Gul', V. E., Zaborovskaya, E. E., Dontsova, E. P.,
and Bubnova, B. G.

INVESTIGATIONS OF THE ADHESION OF THERMO-
SETTING POLYMERS TO GLASS (Issledovanie
Adgezii Termoreaktivnykh Polimerov k Steklu). [17p]
(foreign text included) 14 refs

Order from OTS, SLA, or ETC \$1.60 TT-64-16528

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1963, v. 5, no. 2, p. 269-273.

(Materials--Ceramics, TT, v. 12, no. 4)

TT-64-16528

- I. Gul, V. E.
- II. Zaborovskaya, E. E.
- III. Dontsova, E. P.
- IV. Bubnova, B. G.

Office of Technical Services

ELECTROPHYSICAL
PREPARATION AND ~~ELECTROPHYSICAL~~ PROPERTIES OF SOME
POLY-SCHIFF BASES BY B. E. DAVYDOV, AND B. A.
KRENTSEL', AND ET AL, 5 PP.

RUSSIAN, PER, VYSOKOMOLEKULYARNYYE SOYEDINENIYA,
VOL V, NO 3, 1963, PP 321-324.

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21573

ATS RT-3820

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240,642

Kron, A. K. and Pitsyn, O. B.
STATISTICAL THEORY OF VOLUME EFFECTS IN
MACROMOLECULES. [1963] 7p. 9 refs.
Order from OTS, SLA, or ETC \$1.10 TT- 63-18697

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1963, v. 5, no. 3, p. 412-416.

DESCRIPTORS: *Polymers, Volume, Statistical analysis
*Probability, Theory, *Thermodynamics,

A general statistical method is proposed for investigating volume effects in polymer chains, in which the free energy of the macromolecules is expressed through the probability of segment collision in a partially discharged chain. An approximate expression for the expansion coefficient α of the chain was derived on the basis of calculation of the collision probability for an effective gaussian chain. It was shown (Chemistry--Physical, TT, v. 11, no. 1) (over)

TT- 63-18697

I. Kron, A. K.
II. Pitsyn, J. B.

Office of Technical Services

Rogovin, Z. A. and others.
SYNTHESIS OF NEW CELLULOSE AND OTHER
POLYSACCHARIDE DERIVATIVES. XXV. EFFECT OF
THE STRUCTURE OF ORGANOPHOSPHOROUS
DERIVATIVES OF CELLULOSE ON THE FIRE-
PROOFING OF CELLULOSIC MATERIALS. Communi-
cation no. 114 of Investigation of the Structure and Prop-
erties of Cellulose and its Derivatives. [1964] 10p
10refs

Order from OTS, SLA, or ETC \$1.10 TT-64-10868

Trans. of Vysokomol[ekulyarnye] Soed[inenlya] (USSR)
1963, v. 5, no. 4, p. 506-511.

See also TT-64-15206

(Chemistry--Organic, TT, v. 11, no. 12)

TT-64-10868

- I. Rogovin, Z. A.
- II. Title: Effect...
- III. Title: Investigation...

Office of Technical Services

Thermo-Oxidative Degradation and Stabilization
of Polyformaldehyde, by V. R. Alishoev,
M. B. Newaman, et al.
RUSSIAN, per, Vysokomolekulyarnye Soedineniya,
Vol V, No 5, 1963, pp 644-648.
K-H-13327-b

apr 67

323,172

Kovarskaya, B. M., Akutin, M. S., Sidnev, A. I.,
Yazvikova, M. P., and Neiman, M. B.
STUDY OF THE THERMOOXIDATIVE DEGRADATION
OF POLYCARBONATE. [1964] 7p
Order from ATS \$7.50

ATS-76R74R

Trans. of Vysokomolekul[yarnye] Soedin[eniya] (USSR)
1963, v. 5, no. 5, p. 649-654.

(Chemistry--Organic, TT, v. 11, no. 12)

TT-64-12753

- I. Kovarskaya, B. M.
- II. Akutin, M. S.
- III. Sidnev, A. I.
- IV. Yazvikova, M. P.
- V. Neiman, M. B.
- VI. ATS-76R74R
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